

#### **ASSEMBLY HEADS 3624-41 AND 3624-42**

# Instructions for the assembly of CHG .100" WIREMOUNT SOCKET CONNECTOR to discrete wire

- CHG One Row (.100" Centers) Wiremount Socket
- CHG Two Row (.100" X .100" Centers) Wiremount Socket
- CHG Two Row (.100" X .100" Centers) Military & DIN Polarized Sockets

CHG Connector Style	Wire Gauge Size	Assembly Heads	Use with Pistol Grip	
1 & 2 Row Stackable 1 & 2 Row Centerbump	26 and 28 AWG	Prod. No.		
1 & 2 Row Stackable 1 & 2 Row Centerbump	24 and 22 AWG	3624-41	3M ®	
2 Row Military & DIN	26 and 28 AWG	Prod. No.	•	
2 Row Military & DIN	24 and 22 AWG	3624-42	3586-12 Pistol Grip	

Table 1

#### General:.

These instructions point out the assembly equipment required to assemble CHG socket connectors to discrete wire. Assembly procedures and assembly quality guidelines for termination are explained.

### ASSEMBLY EQUIPMENT

Refer to Table 1 to determine the appropriate Assembly Head to be used with a specific CHG connector.

- 1. Assemble a 3624-XX Assembly Head on to the 3586-12 Pistol Grip. See Figure 1.
- 2. The 3624-41 Assembly Head is used for the 1 and 2 row non MIL-DIN polarized CHG connector. The connector backstop must be set correctly to accommodate a specific connector style. To setup the connector backstop: remove the cap screw, rotate the connector backstop to the appropriate side and replace the cap screw. See Figures 2 and 3.

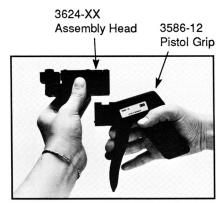


Figure 1

3. The 3624-42 Assembly Head is used for the MIL and DIN polarized CHG connector. The Assembly Head is preset at the factory and no backstop adjustment is required. Refer to Page 4 for seating information.

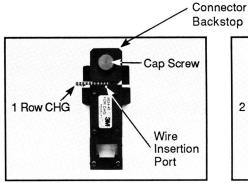


Figure 2

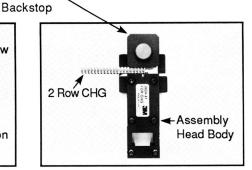


Figure 3

4. Because CHG connectors can accommodate a wide range of wire styles and gauges as shown in Table 2, Page 4, the wire insertion depth must be controlled to maintain termination quality. To assure the correct wire insertion depth, a depth adjustment may be necessary. To adjust the wire insertion depth, a set screw in the base of the Assembly Head (See Figure 4) is adjusted. Use the 1/16" allen wrench (provided) to rotate the adjustment set screw. Clockwise will seat the wire deeper and counter clockwise will seat the wire higher.

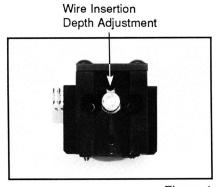


Figure 4

5. The release screw on the side of the pistol grip handle can be turned counter clockwise with a screw driver to release any jam. This will release the internal indexing mechanism and reset the pistol grip and head. See Figure 5.



Figure 5

# WIRE TERMINATION PROCEDURE

1. To insert a connector body into the Assembly Head from the left as shown, actuate the pistol grip trigger handle and hold it in the closed position. Insert the connector body until it stops against the wire termination driver inside the Assembly Head. Release the trigger handle slowly and connector body will index into position automatically. This technique will be especially helpful on short (six conductor and under) connectors.

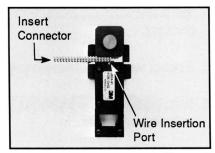


Figure 6

This procedure is used for all body styles. See Figure 6.

2. To insert a wire, place a straight wire in the wire insertion port. The wire should be inserted until it stops on the bottom stop. The wire to be inserted should be grasped about 1" from the termination end of the wire. Special care should be given to hold small 28 AWG wires.

**CAUTION:** Bending wires, forcing wires into the wire insertion port, or entering the port at an angle can cause poor wire termination quality.

3. To terminate the wire, close the pistol grip trigger and then release the trigger to the ready position. This action will also index the connector body to the next contact assembly position. See Figure 7.

CAUTION: Do not allow the trigger to "snap back" as this violent action may cause connector body indexing misalignment.



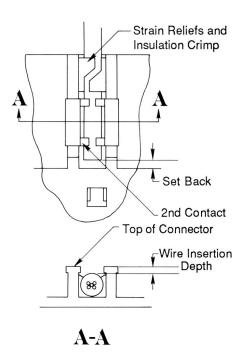
Figure 7

**4.** To remove the connector from the assembly head, grasp the connector body and move it to the right.

## **TERMINATION QUALITY**

All terminations should be inspected for the following:

- 1. Wire termination should be seated in the second contact.
- 2. End of wire should be set back.
- 3. Insulation crimp should be complete with both strain reliefs bent over.
- 4. Wire insertion depth should be measured at Section A-A.
- 5. Check for connector body damage.
  If the depth is not within the tolerance given in the reference chart Table 2, a depth adjustment must be made. Refer to Assembly Equipment #4 on Page 2 for instructions.



#### **TABLE 2**

# WIRE INSERTION DEPTH

(CHG) 1 ROW AND 2 ROW STACKABLE

# WIRE INSERTION DEPTH

(CHG) MILITARY DIN POLARIZED

<u>AWG</u>	UL STD 1061 STRANDED	SOLID	UL STD 1007 STRANDED	<u>AWG</u>	UL STD 1061 STRANDED	SOLID	UL STD 1007 STRANDED
22	.025"	N/A	N/A	22	.042"	N/A	N/A
24	.031"	.035"	N/A	24	.048"	.052"	N/A
26	.036"	.039"	.024"	26	.053"	.056"	.041"
28	.040"	.042"	.028"	28	.057"	.059"	.045"

NOTE: All dimensions are ±.002"

#### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

#### Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 1 year from the date of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.



**Electronic and Interconnect Solutions Division** 

6801 River Place Blvd. Austin, TX 78726-9000 800/255-5373 www.3M.com/eisd



Minimum 10% Post-consumer Fiber Printed in USA

© 3M 2003